APPENDIX 1 COMMENTS FROM PUBLIC AGENCIES

Boston Water and Sewer Commission

980 Harrison Avenue Boston, MA 02119-2540 617-989-7000



August 8, 2006

Mr. Gerald Autler Senior Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201

Re: Northeastern University Institutional Master Plan

Third Amendment and PNFs for Residence Hall I and Building J, and Residence Hall K

Dear Mr. Autler:

The Boston Water and Sewer Commission has reviewed the Third Amendment to the Northeastern University's Institutional Master Plan (IMP) and the Project Notification Form (PNF) for Residence Hall I and Building J, and the PNF for Residence Hall K.

The Third Amendment is being proposed by the University in order to allow the following:

- To amend the current IMP to include housing on Parcel 18 West:
- To provide information on two proposed new residence halls to be constructed on sites at 288 St. Botolph Street and Parcel 18 West, which will allow development of additional on-campus student housing and other university uses;
- To address the designated uses of five sites to meet anticipated future needs;
- To update the list of university-owned properties to include properties acquired since the adoption of the IMP and First and Second Amendments;
- To amend dimensional requirements for the IMP area to permit a height on campus south of Huntington Avenue of 22 stories/220 feet.

Parcel 18 West is located near the intersection of Ruggles and Tremont Streets. The site is currently occupied by a 160-car surface parking lot. Proposed for the site are two high-rise dormitory-style towers designated as Residence Hall I, which will contain up to 1,200 beds with dining, ground floor retail, office space, laundry facilities and other general College and University uses.

Parcel 18 West will also include a six-story building, designated as Building J, which will contain ground floor retail uses, while the upper floors will be used for University offices and meeting space.

The total building program of Parcel 18 West Development is designed to contain approximately 500,000 square feet.

A 50-foot wide MDC sewer easement is located at the southwest corner of the Parcel 18 West site. A 10-foot diameter MWRA sewer is located within the easement. Available drawings indicate that the sewer consists of a 300-foot deep rock tunnel constructed in red sandstone. Future buildings are planned over the easement. It will be necessary for the proponent to obtain a permit from the MWRA for the proposed construction.

Residence Hall K is proposed for the site of the existing Cullinane Hall building at 288 St. Botolph Street. The existing building on the site will be demolished and a new building constructed. The new building will contain approximately 600 enhanced single, double and apartment style residential units, as well as space for multipurpose rooms, student common rooms, lounges, office space, dining and laundry facilities. The building will contain approximately 200,000 square feet of space.

Although no formal plans have been developed at this time, the University is also seeking to change the use of the following University-owned properties under the Third Amendment: Gainsborough Garage Lot, Gainsborough Parking Lot, North Lot, Camden Lot and Ryder Lot. Currently used as parking lots or staging areas for construction, the University is seeking to change the uses to include a variety of new uses, including student housing, student dining, office, research, laboratory, recreation, cultural uses, auditoriums, classrooms, fitness areas, retail/restaurant, laundry, libraries, athletic fields, and several other possible uses.

Many of the Commission's typical comments for projects at this stage of planning were addressed in the IMP/PNFs. Any other concerns the Commission may have can be addressed during the Commission's review of the Site Plans for the projects. However, for consistency and completeness the Commission offers the following comments:

General

- 1. It is the proponent's responsibility to evaluate the capacity of the public water, sewer and storm drainage systems serving the campus and for each individual project to determine if capacity is adequate to meet future project demands.
- 2. For each phase of construction the proponent must submit a site plan and a General Service Application to the Commission. The site plan must show the location of existing public and private water mains, sanitary sewers and storm drains which serve project sites, as well as the location of proposed service connections. With each site plan, the proponent must provide detailed and updated estimates for water demand, sanitary sewer flows and stormwater runoff generation for the proposed project. The amount of potable water required for landscape irrigation must be quantified and provided separately.

- 3. To assure compliance with the Commission's requirements, the proponent should submit site plans and General Service Applications to the Commission for review when project design is 50 percent complete.
- 4. The proponent is advised that any new or reconstructed water, sanitary sewer and drain pipes required to accommodate future development must be designed and constructed at the proponent's expense and in conformance with the Commission's Sewer Use and Water Distribution System regulations.
- 5. Prior to demolition of any buildings, all water, sewer and storm drain connections to the buildings must be cut and capped at the main pipe in accordance with the Commission's requirements. The proponent must then completed a Termination Verification Approval Form for a Demolition Permit, available from the Commission, and submit the completed form to the City of Boston's Inspectional Services Department before a demolition permit will be issued.

Sewage/Drainage

- 6. The campus is served by separate sanitary sewers and storm drains. Separate sanitary sewer and storm drain services must be provided from new buildings constructed to the respective pipe in the street.
- 7. Site plans must show in detail how drainage from building roofs and from other impervious areas will be managed. Roof runoff and other stormwater runoff must be conveyed separately from sanitary waste at all times.
- 8. The Department of Environmental Protection (DEP), in cooperation with the Massachusetts Water Resources Authority (MWRA) and its member communities, are implementing a coordinated approach to flow control in the MWRA regional wastewater system, particularly the removal of extraneous clean water (e.g., infiltration/ inflow (I/I)) in the system. In this regard, DEP has been routinely requiring proponents proposing to add significant new wastewater flow to assist in the I/I reduction effort to ensure that the additional wastewater flows are offset by the removal of I/I. Currently, DEP is typically using a minimum 4:1 ratio for I/I removal to new wastewater flow added. The Commission supports the DEP/MWRA policy, and will require the proponent to develop a consistent inflow reduction plan.
- 9. The proponent must fully investigate methods for retaining stormwater on site before the Commission will consider a request to discharge additional stormwater to the Commission's system. Under no circumstances will stormwater be allowed to discharge to a sanitary sewer. A feasibility assessment for retaining stormwater on site must be submitted with each site plan.

- 10. The discharge of dewatering drainage to a sanitary sewer is prohibited by the Commission. The proponent is advised that the discharge of any dewatering drainage to the storm drainage system, whether temporary or on a permanent basis, requires a Drainage Discharge Permit from the Commission and an NPDES Permit issued by the Environmental Protection Agency (EPA).
- 11. For each phase of construction covering one acre or more, the proponent will be required to obtain coverage under the EPA's NPDES General Permit for Construction. A copy of the Notice of Intent and the pollution prevention plan prepared pursuant to the Permit should be provided to the Commission, prior to the commencement of construction.
- 12. The proponent is advised that a Drainage Discharge Permit is also required for the long-term (permanent) discharge to the drainage of infiltrated groundwater collected via an underdrain system, such as those that are commonly installed in below-grade parking garages.
- 13. The proponent should be aware that the EPA issued a draft Remediation General Permit (RGP) for Groundwater Remediation, Contaminated Construction Dewatering, and Miscellaneous Surface Water Discharges. If groundwater contaminated with petroleum products, for example, is encountered, the proponent will be required to apply for a RGP to cover these discharges.
- 14. The Commission requests that the proponent install a permanent casting stating: "Don't Dump: Drains to Charles River" next to any new catch basin installed as part of this project. The proponent may contact the Commission's Operations Division for information regarding the purchase of the castings.
- 15. In conjunction with each site plan and General Service Application submitted, the proponent will be required to submit a Stormwater Pollution Prevention Plan. Each plan must:
 - Identify specific best management measures for controlling erosion and preventing the discharge of sediment, contaminated stormwater or construction debris to the Commission's drainage system when construction is underway.
 - Include a site map which shows, at a minimum, existing drainage patterns and areas used for storage or treatment of contaminated soils, groundwater or stormwater, and the location of major control or treatment structures to be utilized during construction.
 - Specifically identify how the project will comply with the Department of Environmental Protection's Performance Standards for Stormwater Management both during construction and after construction is complete.

16. Grease traps are required in all new and existing cafeteria or kitchen facilities in accordance with the Commission's Sewer Use Regulations. The proponent is advised to consult with Mr. Richard Fowler, Deputy Superintendent of Field Operations prior to preparing plans for grease traps.

Water

- 17. The Commission utilizes a Fixed Radio Meter Reading System to obtain water meter readings. Where a new water meter is needed, the Commission will provide a Meter Transmitter Unit (MTU) and connect the device to the meter. For information regarding the installation of MTUs, the proponent should contact the Commission's Meter Installation Department.
- 18. The proponent is required to obtain a Hydrant Permit for the use of any hydrant during the construction phase of this project. The water used from the hydrant must be metered. The proponent should contact the Commission's Operations Division for information regarding Hydrant Permits.
- 19. The proponent should explore opportunities for implementing water conservation measures in addition to those required by the State Plumbing Code. In particular the proponent should consider outdoor landscaping which requires minimal use of water to maintain. If the proponent plans to install in-ground sprinkler systems, the Commission recommends that timers, soil moisture indicators and rainfall sensors be installed. The use of sensor-operated faucets and toilets in common areas of buildings should also be considered.

Thank you for the opportunity to comment on this project.

John P. Sullivan, P.E.

Chief Engineer

JPS/as

cc:

J. Walser, BRA

M. Zlody, Boston Env. Dept.

P. Laroque, BWSC

R. Gittens, Esq. Vice Prer. Northeastern Univ.

Boston

Groundwater Trust

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July 28, 2006

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Elliott Laffer

Mr. Gerald Autler, Senior Project Manager Boston Redevelopment Authority One City Hall Square Boston, MA 02201-1007

Subject: Northeastern University Residence Hall I, Building J, and Residence Hall K

Dear Mr. Autler:

Thank you for the opportunity to comment on the Project Notification Form for these new buildings proposed by Northeastern University. The Boston Groundwater Trust was established by the Boston City Council to monitor groundwater levels in those sections of the City where building foundations are threatened by lowered groundwater and to make recommendations for solving the problem. As such, my comments are limited to groundwater related issues.

I appreciate very much the stated commitment of the University, offered both in the PNF and during the recent BRA scoping session, that buildings will be designed to not impact area groundwater levels. The University has experience with the consequences that can occur when groundwater levels remain too low for an extended period of time.

As the PNF notes, the Parcel 18 West project, incorporating Residence Hall I and Building J, is not within the Groundwater Conservation Overlay District, and the GCOD requirements do not apply. However, it might still be worthwhile to consider the feasibility of a recharge system to capture rainwater and maintain groundwater levels.

Residence Hall K is, again as noted in the PNF, within the GCOD. I appreciate the commitment to build without perimeter foundation drains. I also appreciate the commitment to meet the recharge requirements of the GCOD. As I did at the scoping session, I would like to again point out that the recharge requirement is misstated in the PNF. Rather than capturing and recharging the water from a 1 inch rainfall event, the system must be designed to capture one inch of water across the surface area of the building, with no allowance for recharge during the event. This makes the required storage capacity a clearer calculated value.

The section of St. Botolph Street on which the new residence hall will be located is one on which we have seen relatively low groundwater levels. That makes it particularly important that groundwater issues are treated properly as this building is designed and constructed. It also suggests that it would be appropriate to add some additional groundwater monitoring capacity in the immediate area of the building that would be incorporated into the Trust's network after construction.

I look forward to working with the University, its consultants, and the Authority to assure that these projects will have only positive impacts on groundwater levels in the area.

Very truly yours,

Elliott Laffer

Executive Director

Cc: Maura Zlody, BED

August 22, 2006

Mark Maloney, Director
Boston Redevelopment Authority
Boston City Hall, Room 925
Boston, MA 02201

Attention: Gerald Autler, Senior Project Manager

Re: Northeastern University Third Amendment to Institutional Master Plan and Project Notification Forms for Residence Hall I, Building J and Residence Hall K

Dear Director Maloney:

The City of Boston Environment Department has reviewed Northeastern University's (NU) Third Amendment to Institutional Master Plan (IMP Amendment) and Project Notification Forms (PNF) for Residence Hall I, Building J and Residence Hall K and offers the following comments.

IMP

In 2000, NU completed an IMP with a 10-year term. An amendment adding Buildings G and H was granted in 2001. A second amendment was granted in 2004 for 40 Leon Street, West Village Residence Hall F with John D. O'Bryant African American Institute and 10 Coventry Street.

The third IMP Amendment would add Parcel 18 West, describe the proposed residence halls, discuss designated uses for five other parcels, provide an updated property inventory and amend the dimensional requirements for the IMP area to allow a 22-story, 220-foot high (zoning height) building south of Huntington Ave.

<u>List of NU-Owned Property Acquired Since 2000</u>

- Gainsborough Garage 10 Gainsborough Street.
- Gainsborough Lot across the street from the Gainsborough Garage.
- St. Anne's Church 77 St. Stephens Street Proposed future use is offices, meeting space, performance space, cultural space, dining, library and parking for an unspecified number of vehicles.
- 16 St. Cyprian's Street at Columbus Avenue Proposed future use is unspecified general university, office and retail.
- 15 Coventry Street Proposed use is parking lot for an unspecified number of vehicles.

Sites Identified for Future Development

- <u>Gainsborough Garage</u> at 10 Gainsborough Street to be demolished for a
 redevelopment of the block from Gainsborough Street to Mugar Hall. The
 Cullinane Building is located on this block. Construction of a 22-story building with
 about 1,000 beds is anticipated. NU would like approved uses to include, but not
 be limited to:
 - student housing;
 - o student dining;
 - o classroom;
 - o research;
 - laboratory;
 - o recreation;
 - o unspecified, general College and University uses;
 - cultural/art use;
 - o museum;
 - o art studio/public art display space;
 - auditorium/public assembly;
 - o amusement game machines in noncommercial establishment;
 - o classrooms;
 - o fitness center;
 - o offices;
 - o restaurant;
 - o bank:
 - o retail business:
 - o laundry;
 - o eating facilities cafeteria/dining hall/kitchen/coffee bar;
 - o outdoor café:
 - common areas/lounges/coffee bar;
 - o libraries:
 - social/recreational space;
 - o theater; and
 - o athletic facilities.
- Gainsborough Parking Lot across the street from the Gainsborough Garage. NU
 would like approved uses to include, but not be limited to:
 - student housing;
 - o student dining;
 - o classroom:
 - o research;
 - laboratory;
 - o recreation;

o unspecified, general College and University uses; o cultural/art use; o museum; o art studio/public art display space; auditorium/public assembly; o amusement game machines in noncommercial establishment; o classrooms; o fitness center: o offices: o restaurant; o bank; o retail business; o laundry; o eating facilities - cafeteria/dining hall/kitchen/coffee bar; o outdoor café; o common areas/lounges/coffee bar; o libraries; social/recreational space; o theater: and athletic facilities. Camden Lot - across the street from the Gainsborough Garage. This parcel was described in the 2000 IMP as the site of a future 600-space parking garage. NU would like approved uses to include, but not be limited to: o parking; o academic; o administration; o research; o laboratory; o recreation; unspecified, general College and University uses; o cultural/art use; o museum: o art studio/public art display space; auditorium/public assembly; o amusement game machines in noncommercial establishment; o classrooms:

o fitness center:

o offices:

- o restaurant;
- o bank;
- o retail business;
- o laundry;
- o eating facilities cafeteria/dining hall/kitchen/coffee bar;
- o outdoor café:
- o common areas/lounges/coffee bar;
- o libraries;
- social/recreational space;
- o theater: and
- athletic facilities.
- Ryder Lot east of Ruggles Street and north of the Orange Line. This site was
 previously used for surface parking and is now used for construction staging. NU
 would like approved uses to include, but not be limited to:
 - trade shop (replacement for space lost at Gainsborough Garage);
 - o unspecified, general College and University uses;
 - cultural/art use;
 - o museum:
 - o art studio/public art display space;
 - auditorium/public assembly;
 - o amusement game machines in noncommercial establishment;
 - o classrooms:
 - o fitness center:
 - o offices:
 - o restaurant;
 - o bank;
 - retail business;
 - o laundry;
 - o eating facilities cafeteria/dining hall/kitchen/coffee bar;
 - outdoor café;
 - o common areas/lounges/coffee bar;
 - o libraries;
 - social/recreational space;
 - o theater; and
 - o athletic facilities.

RESPONSE TO PROPOSED IMP AMENDMENT

The number and types of uses that NU wants to leave open for each of the Gainsborough Garage, Gainsborough Lot, Camden Lot and Ryder Lot reflect a desire for an Amendment approval that is inconsistent with planning. The laundry list of potential uses, many of which

appear on the list for multiple properties, include some destination uses which will generate significant vehicular and pedestrian traffic, raise environmental concerns and are likely to generate controversy from a community standpoint. We find the breadth of possible uses and their presentation disturbing the request that, prior to the approval of any IMP Amendment, NU be required to describe its overall intent for each identified use and how they might fit together in the context of a plan. The number of parking spaces NU expects to construct on the St. Anne's, 15 Coventry and Camden Lot sites should be identified and discussed as part overall parking planning, beginning with the current inventory.

The IMP Amendment identifies several parcels of future development for the University. The University should, as part of both the IMP and development processes for these parcels, identify the historic resources on the sites and plans for the retention of significant resources. Hopefully these resources were included in and can be cross-referenced from the Northeastern University Preservation Plan dated September 2005.

Future sustainability initiatives under consideration are:

- the development of specifications for least environmentally harmful fertilizer and pesticide products;
- the evaluation of biodegradable serving products;
- student/staff competition to reduce food waste;
- an increased use of two-sided copying capabilities;
- composting grass clippings, leaves and other yard waste;
- composting food service waste;
- use of steam monitoring and irrigation meters;
- investigation of additional "green" products, furniture/casework, manufacturing processes, flooring, etc.; and
- investigating the use of grey water for irrigation systems.

PNFs

The current proposal is demolition of Cullinane Hall at 288 St. Botolph Street, construction of a residence hall on that site and the development of Parcel 18 West for a 1,200-bedresidence hall with 30,000 square feet)SF) for administrative use, 10,000 SF of retail and a 300-seat dining hall. Classrooms may also be included in the Parcel 18 West building. The IMP/PNF indicates that two buildings are to be constructed on Parcel 18 West but the current plan is to construct a single 22-story structure.

Parcel 18 West is a 160-car surface parking lot at the corner of Tremont Street and Ruggles Street across from the Boston Police Department Headquarters. The project proposed for the site is Residence Hall I, two 22-story towers connected by a 12-story element. Uses are described as, but not limited to:

about 1,200 beds;

- cultural/art use;
- museum;
- art studio/public art display space;
- auditorium/public assembly;
- amusement game machines in noncommercial establishment;
- classrooms:
- fitness center;
- offices:
- restaurant;
- bank:
- retail business;
- laundry;
- eating facilities cafeteria/dining hall/kitchen/coffee bar;
- outdoor café;
- common areas/lounges/coffee bar;
- libraries;
- social/recreational space; and
- theater.

NU proposes to begin construction in March 2007 and occupy the building in September 2009.

What is identified in the IMP Amendment/PNF as Residence K, is to be constructed on the site of the Cullinane Building at 288 St. Botolph Street. Uses are described as, but not limited to:

- about 600 beds;
- cultural/art use:
- museum;
- art studio/public art display space;
- auditorium/public assembly;
- amusement game machines in noncommercial establishment;
- classrooms:
- fitness center;
- offices;
- restaurant;
- bank:
- retail business:
- laundry;
- eating facilities cafeteria/dining hall/kitchen/coffee bar;
- outdoor café;
- common areas/lounges/coffee bar;
- libraries;
- social/recreational space; and
- theater.

NU will construct projects using existing infrastructure and will work to:

- minimize reliance on automobiles;
- reduce water usage,
- limit disruption of the natural flow of stormwater;
- optimize energy performance;
- effectively use natural lighting;
- reduce ozone depletion;
- favor building materials and office products that include recycled content;
- emphasize regional material selection;
- provide a high level of occupant control over temperature, ventilation and lighting;
- provide good indoor air quality.

An existing solid waste recycling program will be implemented at the projects.

RESPONSE TO PNFs

Again, a long list of uses for each proposal, some of which overlap with each other and with those on the lists for the Gainsborough Garage, Gainsborough Lot and Ryder Lot. We reiterate our concern about such wide-open expectations, particularly as these potential uses are not tied to a planning context. The IMP Amendment and each Draft Project Impact Report (DPIR) must demonstrate an integration missing from the Amendment request and PNFs.

The DPIRs should describe the sizes of space for the uses for which NU is seeking approval at each project, expected hours of operation, target users and associated transportation characteristics.

This department recommends the implementation of a broad-based, policy-driven sustainability plan consistent with Mayor Thomas M. Menino's ongoing, multi-faceted effort to make Boston a national leader in sustainability. New construction provides opportunities to protect the environment and construct high performance buildings that minimize utility and operating costs through the use of energy and resource conserving materials, practices, technologies beyond those planned for the subject projects.

Green roofs may be a good option for reducing heat gain, lower cooling costs, extending the life of roofing membranes by blocking UV rays, providing added thermal and noise insulation and slowing stormwater runoff.

Some sustainable practices may be appropriate for the current as well as future projects. Integrated Pest Management (IPM) and Integrated Vegetation Management (IVM) plans can help to advance the goals of using the least environmentally harmful fertilizer and pesticide products. Information on IPM and IVM are widely available. An Environmentally Preferable Purchasing (EPP) program Working Group composed of faculty and staff can be used to create

an ongoing, evolving project that will help with user buy-in of sustainable practices such as default double-sided copying. We encourage NU to consider a more ambitious program of sustainability and to use students, staff and faculty as resources.

The DPIRs should provide more detail on sustainability measures planned for the projects.

We also suggest that NU make public in the DPIRs its present efforts as an environmentally responsible neighbor.

Shadow studies should be conducted for the hours 9:00 a.m., 12:00 noon and 3:00 p.m. for the vernal equinox, summer solstice, autumnal equinox and winter solstice and for 6:00 p.m. during the summer solstice and autumnal equinox. Diagrams should include:

- a north arrow:
- street names:
- the identification of doorways, bus stops, open space and areas where pedestrians are likely to congregate;
- clear delineation of shadow on both rooftops and facades; and
- clear distinctions between existing shadow and new shadow.

The diagrams should be of a scale and orientation consistent with that used for diagrams depicting wind monitoring locations, no build and build, so that the combined effect of shadow and wind can be assessed.

As a means to ensure compliance with the Commonwealth's anti-idling law (MGL 90 s16A and 310 CMR 7.11), we request that "No Idling" signage be posted at drop-off/pick-up and loading/delivery locations.

The quality of stormwater is receiving increasing regulatory attention as it is a primary contributor to the condition of receiving water bodies. The Boston Water and Sewer Commission (BWSC) spends more than \$600,000 annually for the disposal of materials removed from catch basins. This cost does not include labor and general operating and maintenance costs. If the project requires the installation of and/or work at stormdrains, we ask that the NU help to educate the public and further improve the water quality of local water bodies by agreeing to the permanent installation of plaques that bear the warning "Don't Dump - Drains to Boston Harbor." Information on the casting can be obtained from the Operations Division of the BWSC (617-989-7000).

We understand that Elliott Laffer, Executive Director of the Boston Groundwater Trust, has commented on the PNFs and we encourage NU to work closely with him to develop mechanisms for monitoring and ensuring appropriate groundwater levels.

The DPIRs should describe a plan for stormwater recharge and detention.

As it is good policy and as the state bans the disposal of recyclables, tenants at the projects should be required to develop and implement solid waste recycling programs. Allowing tenants to participate in the NU program should be considered. Other resources for a recycling program include Save That Stuff which offers recycling of paper, metal cans, plastic jugs and glass bottles (http://www.savethatstuff.com) and the WasteCap Small Business Recycling Services Directory (http://www.wastecap.org/wastecap/Publication/small_businessRSD.pdf). The DPIRs should address this issue.

As art studio is listed as a potential use at each project, the DPIRs must describe a plan for the safe and proper storage and disposal of paints, solvents and other materials used by artists.

Exterior lighting should meet safety needs while not contributing to light pollution. Fixtures should be shielded and downward directed. We recommend as a resource, the Campaign for Dark Skies and their "Solutions and Problems: Good and bad lighting" information which can be accessed at 'http://www.star.le.ac.uk/~dbl/cfds/goodvbad.htm?60'.

The projects are subject to the residential sound limits established under the <u>Regulations for the Control of Noise in the City of Boston</u>. This department frequently receives complaints from citizens objecting to the level of noise disturbance from externally placed equipment. Equipment should be properly sized to serve the proposed project but should not provide excess capacity. To minimize the noise impact of any emergency generators during the operation of the project, they should be tested the minimum number of times recommended by the manufacturer at times when ambient noise levels in the area are high. Acoustical enclosures should be employed around all mechanicals to ensure compliance with noise regulations.

The staff of the Boston Landmarks Commission (BLC) has reviewed the combined IMP Amendment/PNF. The current document contains information relative to the construction of two new buildings (including one dormitory) on Parcel 18 West, and a proposed dormitory on the current site of 288 St. Botolph Street, Cullinane Hall although one large building is now proposed for the Parcel 18 West site.

The overall development approach for Parcel 18 West as described in the PNF is appropriate to its urban context. The buildings' placement, at the site perimeters, would enhance the street edge. The height of the towers is of concern, both for the shadows they may cast on the nearby neighborhood and lack of similar scale in this portion of Boston. Staff looks forward to reviewing the new proposal with more detailed renderings. Materials updating the design should be provided to this department prior to any action by the BRA.

Although Cullinane Hall is listed in the Northeastern University Preservation Plan of September 2005, it appears under the erroneous address of 288 Huntington Avenue (instead of 288 St. Botolph Street). This area of the city is characterized by remnants of low-scale brick and

masonry buildings that once contained industrial uses. It is unfortunate that NU is not considering the retention of 288 St. Botolph Street and the possibility of incorporating the existing structure into new construction.

The demolition of 288 St. Botolph Street will require Article 85 review from the BLC. All projects that require a demolition permit from the City's Inspectional Services Department also require Article 85 review. For questions about the Article 85 process, please contact Roysin Bennett Younkin at 617-635-3850.

According to the Massachusetts Department of Environmental Protection (DEP), about 33 percent of mobile source particulate matter (PM) and ten percent of all nitrogen oxide (NO $_{\rm x}$) pollution in the northeast is caused by construction vehicles. More than 90 percent of diesel engine particulate emissions are highly respirable and carry toxins deep into the lung, exacerbating human respiratory ailments. The U. S. Environmental Protection Agency (EPA) has proposed classification of diesel exhaust as "highly likely to be carcinogenic in humans." It estimates that diesel engines currently on the road can run for 1,000,000 miles and remain in operation for as much as 20 to 30 years. This amounts to 160 to 240 tons of pollution over the life of each engine.

The DEP's Clean Air Construction Initiative (CACI) is designed to reduce air quality degradation caused by emissions of carbon monoxide (CO), volatile organic compounds (VOC), NO_x and air toxins from heavy- duty, diesel-powered construction equipment. Oxidation catalysts and catalyzed particulate filters reduce toxic emissions of formaldehyde, benzene, acrolein and 1-3 butadiene by as much as 70 percent. The CACI offers contractors a cost-effective way to decrease localized adverse impacts and reduce dust and odor complaints from project abutters and regulatory agencies. Experience with a pilot project that retrofitted 83 pieces of equipment working on the Central Artery/Tunnel (CA/T) project showed that:

- Vehicles did not experience significant power loss.
- There are no additional operation and maintenance (O & M) or fuel costs.
- Engine manufacturers continue to honor vehicle warranties.

More information on the CACI can be obtained from Steven G. Lipman, P.E. of DEP at 617-292-5698.

We urge NU to require that contractors use retrofitted equipment and ultra low-sulfur diesel (ULSD) fuel (15 ppm), in off-road construction equipment.

This department receives frequent complaints about noise generated at construction sites before 7:00 a.m. Complaints show that contractors often allow workers on site before that time. Noise is often related to the run-up of diesel equipment and the preparation and movement of tools and materials. No sound-generating activity is allowed to occur at the site prior to 7:00 a.m.

Regular vacuum cleaning of streets and sidewalks in the project area should be employed to ensure that they remain free streets of dust and debris. The use of a vacuum cleaner is an important measure for preventing construction-related dust and debris from clogging storm drains.

Some excess building materials may be suitable for donation to the Building Materials Resource Center (100 Terrace Street, Roxbury, 02120, 617-442-8917). This non-profit center offers, for only a handling fee, new and used materials for low and middle income homeowners.

For the recycling of demolition waste and construction debris not suitable for use by the BMRC, we recommend talking with Mark Lennon of The Institution Recycling Network (IRN) at 1-866-229-1962. IRN can divert up to 95 percent of waste from a job site. End markets have been identified for:

- furniture and furnishings;
- formed concrete, including rebar;
- brick and block; asphalt pavement;
- dimensional lumber and plywood;
- engineered wood products;
- treated wood:
- ceramics (sinks, toilets);
- mixed construction debris;
- ferrous scrap;
- non-ferrous scrap;
- gypsum wallboard;
- commercial (membrane), metal and slate roofing material;
- asphalt roof shingles;
- wood and metal doors and windows; and
- universal waste (batteries, fluorescent lamps, ballasts).

The DPIRs should include draft Construction Management Plans (CMP). and future IMP construction policies and practices.

The City of Boston's is seeking to reduce the number of motor vehicles that enter Boston each day, currently 600,000. We infer that construction workers will be able to use the Renaissance Park parking garage. Because of such availability, it is important that a comprehensive Transportation Demand Management (TDM) plan be established for all construction workers. The following elements would be part of a comprehensive TDM plan:

- Offering pre-tax payroll deduction for Massachusetts Bay Transportation Authority (MBTA) pass purchase.
- Providing through Commuter Check MBTA pass subsidies for all employees with a pro rata subsidy for part-timers.

- Providing a ride-matching service.
- Charging parking rates that create disincentive for single occupant vehicle commuting.
- Offering reduced rate parking for carpools of three or more workers.
- Providing secure, on-site storage so that workers' tools can remain safely at the project overnight.

Given the potential uses at both projects, the trip generation data would seem to be very speculative. Firm information about uses is necessary for a good estimation of trip generation, vehicle occupancy rates (VOR), mode splits and other transportation information.

Both projects should have bicycle racks for staff, visitors and customers in addition to the storage planned for students. Tenants at the projects should be required to join with NU in offering the range of TDM measures offered by the University.

FUTURE IMP

As NU contemplates its next IMP, we ask that our comments on this proposed IMP Amendment and PNFs be used to inform planning. Sections on sustainability, healthy construction practices, environmental protections (ex. air quality, groundwater, noise, stormwater management).

Thank you for the opportunity to offer comment. We look forward to additional IMP Amendment information and to the DPIRs.

Sincerely,

Bryan Glascock
Director

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